

**REMARKS**

Claims 1-26 remain in the application. Reconsideration of claims 1-26 is respectfully requested.

**Claims 1-26 were rejected as being unpatentable under over US Pat. No. 6,486,832 (Abramov) in view of US Pat. No. 6,980,782 (Braun et al).**

Applicant respectfully traverses the rejection. Neither reference taken individually or in combination teach or suggest that which is claimed by Applicant's invention.

Independent claim 1 recites "at least one single wire memory device programmed with antenna parameter information, the antenna parameter information within the antenna being accessed by the portable communication device." Claim 8 recites "single wire memory device programmed with antenna parameter information," and further recites "the antenna parameter information being accessed through the single coaxial connector." Claim 12 recites "a single wire memory device programmed with antenna parameter information." Claim 22 recites "a memory embedded within the antenna programmed with antenna parameter information." Claim 24 recites "the antenna comprising a memory device storing antenna parameter information."

Applicant respectfully submits that neither Abramov nor Braun, either expressly or inherently, teaches or suggests that which is claimed in independent claims 1, 8, 12, 22, and 24. Applicant respectfully notes the following observations in the Examiner's Detailed Action dated October 4, 2007 in the hope of clarifying the use of the term "single wire memory device":

**A)** In the Examiners "Detailed Action", on Page, 2 item 2, second paragraph, the Examiner states that

"..., the antenna (12 of figs. 1, 12 of figs 3-4) includes at least "one single memory device" (33 of fig 4; col. 2, lines 55-65; col. 3, lines 18-41; col. 3 line 53-col. 4, line 27; col. 4, lines 42-67)".

Firstly, Applicant respectfully points out that the figures clearly show that the only referenced memory in Abramov (33) is in the Antenna Control Unit 30 (as in the antenna positioning system by one skilled in the art), and not in the antenna itself which is clearly labeled as 12.

Secondly, the Examiner refers to a “single memory device” which is not a term used in Abramov. Even if the term “single memory device” had been used by Abramov, Applicant asserts that a “single memory device” and a “single wire memory device” are two completely different things. The “single memory device” refers to just one device and it is a memory. The “single wire memory device” is intended to mean a memory device interfaced and powered via single-wire (AKA 1-wire) bus. The term “single wire memory device” is fully described in applicant’s specification, for example on page 4, lines 3-7.

The citations put forth by the Examiner to support “at least one single memory device” in Abramov are countered below:

- Designator 33 of fig 4 – the figure says “Flash & RAM” which are shown in the figure as separate and even if these devices be could construed as “at least one single memory device”, they are not in the antenna.
- Col. 2, lines 55-65 – This section describes only a mechanically scanned antenna and makes no mention of any memory usage at all.
- Col. 3, lines 53-Col.4, line27 – in this section Abramov describes the memory as being a part of the “antenna control unit” and describes memory 33 as storing application software basically for operating the “antenna [direction] control unit”.
- Col. 4, lines 42-67 – in this section Abramov FIG. 5 is described which is a set of laptops communicating with the steerable antennas of Abramov. There is no reference to memory of any kind.

In all of the citations to Abramov, the only support the Examiner documented for supporting “at least one single memory” was the reference in FIG. 4 to “Flash & RAM” 33 which, as mentioned

above is not a “single wire memory”; and further, is not in the antenna - it is in the antenna [direction] control unit 30.

Again, Applicant does include a description of a “single wire” technology in the specification, for example, on page 4, lines 3-7. Thus, the use of the term “single wire memory device” is not unreasonable and is fully supported by the specification.

**B)** On page 4 of the Office Action (lines 2-4), the Examiner states:

“... wherein the at least one single wire memory device can be manipulated by the portable communication device (col. 3, line 20-col.4, line 10; col.4, lines 19-41).”

Applicant respectfully points out that the Examiner has now started using the term “single wire” terminology. In this overlapping range to the previous citation, there is no new suggestion of “single wire” technology to be found anywhere. The Examiner re-uses the only reference in Abramov which is to a memory that is in the antenna [direction] control unit 30. There is absolutely no teaching of a single wire memory device in Abramov.

The Examiner continues to use the term “single wire” in arguments citing Abramov, but there is simply no teaching of single wire technology in Abramov. The term single wire in Applicant’s specification pertains to the one-wire bus context as described and supported by Applicant’s specification. Applicant believes that the above discussion has clarified the use of the term “single wire memory device”.

Applicant reiterates the arguments provided in the last response below on a claim by claim basis.

Abramov describes an antenna housing that contains a spinning antenna, a motor driver, and a motor. The antenna housing is connected to a controller, which further contains a transceiver, an antenna control unit, and a computer. The antenna control unit has a Random Access Memory (RAM) that stores application software. The application software is used by a Digital Signal Processor (DSP) to control the motor in the antenna housing. In addition, the

transceiver receives and sends RF signals to the antenna and the antenna control unit sends the direction-selection signals to the antenna. See col. 2, lines 54-65, and col. 3, line 41 to col. 4, line 27 of Abramov.

As far as the embodiment of Abramov's FIG. 3 and FIG. 4, component "33" (flash/RAM) is contained in "30" (antenna control unit) which is contained within "20" (controller). Controller "20" is outside of the antenna in both FIGs 3 and 4. Even if we consider the embodiment of FIG. 6, described only in col. 5, lines 18-35, which moves control unit "30" (having memory "33") out of "20" (controller) and into the antenna, nowhere is there a teaching of accessing this memory by a communication device, as claimed in Applicant's claim 1.

Applicant's claim 1 recites a "single wire memory device" that is "programmed with antenna parameter information." In contrast, Abramov makes no mention of a single wire memory device programmed with antenna parameter information. At most, Abramov simply discloses an antenna unit that has flash memory that stores application software (executable code) for the DSP to generate a "direction/selection signal". See col. 4, lines 21-23 of Abramov. Abramov's "direction/selection signal" is not equivalent to Applicant's antenna parameter information. Thus, Applicant's claimed limitation is not found in Abramov.

In addition, claim 1 recites that "the antenna parameter information within the antenna" is "being accessed by the portable communication device." In contrast, Abramov describes that the stored application software is being used by the DSP that is located in an antenna control unit. See col. 4, lines 21-27 of Abramov. Thus, Abramov is missing a further limitation claimed by Applicant.

Applicant's claim 8 recites a "single wire memory device programmed with antenna parameter information," which as discussed above is not found in Abramov. In addition, claim 8 recites that "the antenna parameter information" is "being accessed through the single coaxial connector." As mentioned above, since Abramov fails to disclose "the antenna parameter information," "the antenna parameter information being accessed through the single coaxial connector" is also not found in Abramov. At most, Abramov discloses data being sent to

peripherals through a universal serial bus (USB). See col. 2, lines 61-67 of Abramov. Applicant asserts that a single coaxial connector and universal serial bus are two entirely different interface mechanisms and one cannot be substituted for the other. USB requires four wires, and thus can not be equated to a single coaxial connector.

Applicant's claim 12 recites "a single wire memory device programmed with antenna parameter information," which as discussed above is not found in Abramov. Thus, Applicant respectfully submits that claim 12 is allowable.

Applicant's claim 22 recites "a memory embedded within the antenna programmed with antenna parameter information," which as discussed above is not found in Abramov. Thus, Applicant respectfully submits that claim 22 is allowable.

Applicant's claim 24 recites "the antenna comprising a memory device storing antenna parameter information," which as discussed above is not found in Abramov. Thus, Applicant respectfully asserts that claim 24 is allowable.

With regard to claim 9, Applicant respectfully disagrees with the statement on page 6 of the Office Action dated October 4, 2007 that "[r]egarding claim 9, Abramov et al discloses a radio and antenna interface (figs. 1 and 6) system, comprising: a radio including radio electronic circuitry (figs. 3-5) for diplexing RF and baseband signals... an antenna (12 of figs. 1, 12 of figs. 3-4) including antenna electronic circuitry for diplexing RF and baseband signals... a memory device embedded in the antenna and coupled to the coaxial interface (col. 2, lines 55-65; col. 3, lines 18-41; col. 3, line 53-col. 4, line 27; col. 4, lines 42-67)."

Applicant's claim 9 recites "radio electronic circuitry for diplexing RF and baseband signals." Abramov makes no mention of radio electronic circuitry that is used for diplexing RF and baseband signals. At most, Abramov simply discloses a circuit in a transceiver that receives and transmits RF signal. See col. 3, lines 42-53 of Abramov. Thus, Applicant respectfully requests the Examiner to provide exact citation (line numbers) showing such a limitation or withdraw the rejection.

Further, Abramov makes no mention of antenna electronic circuitry that is used for diplexing RF and baseband signals. At most, Abramov simply discloses an antenna connected to a motor. See col. 2, lines 56-60. In contrast, Applicant's claim 9 recites "antenna electronic circuitry for diplexing RF and baseband signals." Thus, Applicant respectfully requests the Examiner to provide exact citation (line numbers) showing such a limitation or withdraw the rejection.

In addition, Applicant's claim 9 recites "a memory device embedded in the antenna and coupled to the coaxial interface." In contrast, Abramov discloses a flash memory that is connected to a DSP in an antenna control unit. See col. 4, lines 19-23 of Abramov. Thus, Abramov makes no mention of a memory device that is embedded in the antenna and coupled to the coaxial interface as required by independent claim 9.

Regarding claim 15, Applicant respectfully disagrees with the statement on page 9, of the Office Action that "[r]egarding claim 15 and 18, Abramov et al discloses an antenna interface (figs. 1 and 6) comprising: an antenna center conductor (12 of figs. 1, 12 of figs. 3-4)..." Abramov makes no mention of an antenna center conductor within an antenna. At most, Abramov simply discloses an antenna connected to a motor. See col. 2, lines 56-60. In contrast, Applicant's claim recites "an antenna center conductor within an antenna." Thus, Applicant's such a limitation is not found in Abramov.

In addition, Office Action provides no citation to Applicant's claim 15 limitation "a single wire memory device within the antenna, the single wire memory device electrically coupled to the antenna center conductor." Applicant therefore respectfully requests the Examiner to provide exact citation (line numbers) showing such a limitation or withdraw the rejection.

In view of the foregoing, Applicant respectfully submits that Abramov does not disclose Applicant's above mentioned limitations. As such the combination of Abramov and Braun do not teach or suggest that which is claimed by Applicant's invention. Applicant therefore submits that independent claims 1, 8, 9, 12, 15, 22, and 24 are not obvious in view of Abramov taken alone or in combination with Braun and therefore the rejection of claims 1, 8, 9, 12, 15, 22, and

24 under 35 USC 103(a) is improper and should be withdrawn. Applicant respectfully requests that claims 1, 8, 9, 12, 15, 22, and 24 may now be passed to allowance.

Dependent claims 2-7 depend from, and include all the limitations of independent claim 1, dependent claims 10 and 11 depend from, and include all the limitations of independent claim 9, dependent claims 13 and 14 depend from, and include all the limitations of independent claim 12, dependent claims 16-21 depend from, and include all the limitations of independent claim 15, dependent claim 23 depends from, and includes all the limitations of independent claim 22, dependent claims 25 and 26 depend from, and include all the limitations of independent claim 24, which is shown to be allowable for the reasons given above. Therefore, Applicant respectfully submits that dependent claims 2-7, 10, 11, 13, 14, 16-21, 23, 25, and 26 are in proper condition for allowance and requests that claims 2-7, 10, 11, 13, 14, 16-21, 23, 25, and 26 may now be passed to allowance.

#### Conclusion

Applicant has reviewed the references of record and believes that Applicant's claimed invention is patentably distinct and nonobvious over each reference taken alone or in combination. Applicant respectfully requests that a timely Notice of Allowance be issued in this case. Such action is earnestly solicited by the Applicant. Should the Examiner have any questions, comments, or suggestions, the Examiner is invited to contact the Applicant's attorney or agent at the telephone number indicated below.

Please charge any fees that may be due to Deposit Account 502117, Motorola, Inc.

Respectfully submitted,

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